



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,144	04/17/2001	Hiroko Iwasaki	2271/50717-AY	7345
7590 RICHARD F. JAWORSKI Cooper & Dunham LLP 1185 Avenue of the Americas New York, NY 10036			EXAMINER	
			MCPHERSON, JOHN A	
			ART UNIT	PAPER NUMBER
			1795	
			MAIL DATE	DELIVERY MODE
			08/18/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/836,144	IWASAKI, HIROKO	
	Examiner /John A. McPherson/	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

**Status**

1) Responsive to communication(s) filed on 27 May 2008.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 16,20,21,26 and 27 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 16,20,21,26 and 27 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/24/08 has been entered.

#### ***Response to Amendment***

2. The Amendment filed 4/24/08 successfully overcomes the rejections set forth in paragraphs 3 and 4 of the Office Action mailed 1/24/08 by deleting the elected species from the scope of the presently claimed invention. Accordingly, these rejections are withdrawn, and the Examiner has expanded the search to include another claimed species.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 20, 21, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 5-159362 (JP '362) in view of US 5,156,693 to Ide et al. [reference AE of the Information Disclosure Statement filed 4/17/01] (Ide).

JP '362 discloses a phase transition type optical recording medium comprising protective layers **2, 4** comprising ZnO and SiO<sub>2</sub> on both sides of a recording layer **3** which is reversibly changed in phase by irradiation with a laser, wherein the mol ratio of the ZnO to the SiO<sub>2</sub> is 8:2-4:6, exemplified as 40 mol % ZnO. Furthermore, the optical recording medium comprises reflective cooling layer **5**. See the abstracts, paragraphs [0009], [0013], [0014], [0024] and [0025] of the computer-generated translation; and Figures 1 and 4.

It is the position of the Examiner that zinc oxide inherently has a thermal conductivity greater than or equal to 10W/m.deg when in the bulk state, because thermal conductivity in the bulk state is a material dependent property.

With respect to claims 20 and 21, it is the position of the Examiner that the statements "for use with the phase variation type data recording layer in a EFM modulation type recording system" and "for use with a recording mechanism which uses melting and rapid cooling of the phase variation type data recording layer" are statements of intended use for the claimed recording medium, and therefor do not provide a patentable distinction between the presently claimed recording medium layer and the recording medium of the applied prior art.

However, JP '362 does not disclose a phase variation type recording layer consisting mainly of Ag, In, Sb and Te.

Ide discloses a phase change type of information recording medium comprising heat resistant protective layers, a reflective layer which reflects light and/or discharges heat, and a recording layer which comprises a recording material of the composition AgInTeSb. See column 3, lines 3-16; column 4, lines 32-40; and column 5, lines 33-40. It would have been obvious to one skilled in the requisite art to utilize AgInTeSb, as taught by Ide, as the phase transition type material in the optical recording medium of JP '362, because it is taught that AgInTeSb is a phase-change type recording material which exhibits a long life expectancy, improved C/N and writing ratios, and improved writing and erasing sensitivities.

***Response to Arguments***

5. Applicant's arguments with respect to claims 16, 20, 21, 26 and 27 have been considered but are moot in view of the new ground(s) of rejection.
  
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /John A. McPherson/ whose telephone number is (571) 272-1386. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John A. McPherson/  
Primary Examiner  
Art Unit 1795

JAM  
8/15/08